CLAIMS

1. A method for treating negative symptoms of schizophrenia in a subject, comprising administering an effective amount of a cell/support complex comprising therapeutic cells to a site in said subject's brain, wherein said cell/support complex comprises therapeutic cells which produce dopamine or a dopamine precursor adherent to a first support matrix, thereby alleviating said symptoms.

2. The method of claim 1, wherein said cell/support complex is administered to the subject by injection.

3. The method of claim 1, wherein said cell/support complex is administered to the subject by implantation.

4. The method of claim 1 wherein said first support matrix is made of material selected from the group consisting of glass, polystyrene, polypropylene, polyethylene, polyvinylidene fluoride, polyurethane, polyalginate, polysulphone, polyvinyl alcohol, acrylonitrile polymers, polyacrylamide, polycarbonate, polypentene, polypentane, acrylonitrile polymer, nylon, magnetite, natural polysaccharide, modified polysaccharide, collagen, gelatin and modified gelatin.

5. The method of claim 4, wherein said first support matrix is gelatin or modified gelatin.

6. The method of claim 5 wherein said first support matrix is crosslinked gelatin.

7. The method of claim 1 wherein the cell/support complex is administered to the prefrontal cortex of the subject's brain.

8. The method of claim 1, wherein the therapeutic cells are selected from the group consisting of retinal pigmented epithelial cells, human foreskin fibroblasts, chromaffin cells, cells of neural origin, paraneural cells, cells engineered by somatic cell hybridization, cells derived from the adrenal medulla, and cells that have been genetically engineered to express a biologically active compound.

9. The method of claim 8 wherein the therapeutic cells produce a dopamine precursor.

10. The method of claim 8 wherein the cells produce dopamine.

11. The method according to claim 8 wherein the therapeutic cells are retinal pigmented epithelium (RPE) cells.

12. The method of claim 1 wherein the subject is a human.

13. The method of claim 1 wherein said cell/support complex further comprises protective cells.

14. The method of claim 13 wherein said cell/support complex further comprises support cells.

15. The method of claim 1 wherein said cell/support complex further comprises protective cells adherent to a second support matrix.

16. The method of claim 15 wherein said cell/support complex further comprises support cells adherent to a third support matrix.

17. The method of claim 1 wherein the negative symptom is selected from the group consisting of affective flattening, alogia, avolition, anhedonia, social withdrawal, and apathy.

18. The method of claim 1, wherein the positive symptoms of schizophrenia are also alleviated.

19. A method for treating extrapyramidal side effects (EPS) produced by antipsychotic drugs, comprising administering an effective amount of a cell/support complex comprising therapeutic cells to a site in said subject's brain, wherein said cell/support complex comprises therapeutic cells which produce dopamine or a dopamine precursor adherent to a first support matrix, thereby alleviating said symptoms.

20. The method of claim 19 wherein said EPS is tardive dyskinesia.

21. The method of claim 20 wherein said cell/support matrix is administered to the striatal area of said subject's brain.

22. The method of claim 21 wherein said cell/support matrix is administered by injection.

23. The method of claim 21 wherein said cell/support matrix is administered by implantation.

24. The method of claim 21 wherein said first support matrix is made of material selected from the group consisting of glass, polystyrene, polypropylene, polyethylene, polyvinylidene fluoride, polyurethane, polyalginate, polysulphone, polyvinyl alcohol, acrylonitrile polymers, polyacrylamide, polycarbonate, polypentene, polypentane, acrylonitrile polymer, nylon, magnetite, natural polysaccharide, modified polysaccharide, collagen, gelatin and modified gelatin.

25. The method of claim 24, wherein said first support matrix is gelatin or modified gelatin.

26. The method of claim 25 wherein said first support matrix is crosslinked gelatin.

27. The method of claim 21, wherein the therapeutic cells are selected from the group consisting of retinal pigmented epithelial cells, human foreskin fibroblasts, chromaffin cells, cells of neural origin, paraneural cells, cells engineered by somatic cell hybridization, cells derived from the adrenal medulla, and cells that have been genetically engineered to express a biologically active compound.

28. The method of claim 27 wherein the therapeutic cells produce a dopamine precursor.

29. The method of claim 27 wherein the cells produce dopamine.

30. The method according to claim 29 wherein the therapeutic cells are retinal pigmented epithelium (RPE) cells.

31. The method of claim 21 wherein the subject is a human.

32. The method of claim 21 wherein said cell/support complex further comprises protective cells.

33. The method of claim 32 wherein said cell/support complex further comprises support cells.

34. The method of claim 21 wherein said cell/support complex further comprises protective cells adherent to a second support matrix.

35. The method of claim 34 wherein said cell/support complex further comprises support cells adherent to a third support matrix.

36. A method for improving cognitive deficits associated with schizophrenia, comprising administering an effective amount of a cell/support complex comprising therapeutic cells to a site in said subject's brain, wherein said cell/support complex comprises therapeutic cells which produce dopamine or a dopamine precursor adherent to a first support matrix, thereby alleviating said cognitive deficits.

37. A pharmaceutical composition comprising therapeutic cells and protective cells adhered to a support matrix.

38. The composition of claim 37, wherein said composition further comprises support cells adhered to a support matrix.

39. A kit suitable for use in treating the symptoms of schizophrenia, comprising in a suitable packaging:
therapeutic cells that produce dopamine; and
a support matrix, wherein the cells can be adhered to the support matrix.

40. The kit according to claim 39 wherein the cells and the support matrix are each contained in separate containers.

41. The kit according to claim 39, wherein said kit further comprises protective cells.

42. The kit according to claim 41, wherein said kit further comprises support cells.

43. The kit according to claim 39, wherein said kit further comprises support cells.